



**24F-V3/SP**

Load Duration Factor = 1.00, Fb = 2,400 psi, Fv = 300 psi, E = 1,800,000 psi

10-3/4-INCH WIDTH		SPAN (ft)																			
Depth (in.)	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
11	3439	2271	1419	941	652	467	344	258	197	151	118	92	72	56	---	---	---	---	---	---	---
12-3/8	4350	2983	2029	1348	937	674	498	376	289	225	176	139	111	88	70	55	---	---	---	---	---
13-3/4	5346	3668	2664	1858	1294	933	692	525	405	317	251	200	161	129	105	84	68	54	---	---	---
15-1/8	6442	4420	3212	2433	1731	1251	930	707	547	430	342	275	222	181	148	121	99	81	66	53	---
16-1/2	7637	5242	3809	2887	2256	1632	1215	926	719	567	452	365	297	243	200	165	137	113	93	77	63
17-7/8	8931	6131	4457	3378	2643	2084	1554	1186	922	729	584	472	386	318	263	218	182	152	127	106	88
19-1/4	10324	7088	5153	3907	3058	2454	1949	1489	1160	919	737	598	490	405	336	281	236	198	167	141	119
20-5/8	11814	8112	5899	4473	3502	2811	2302	1840	1435	1138	915	744	611	506	422	354	298	252	214	181	154
22	13402	9204	6694	5077	3975	3192	2615	2178	1750	1389	1119	911	750	622	520	438	370	314	268	228	195
23-3/8	15088	10363	7538	5718	4478	3596	2946	2455	2074	1675	1350	1101	908	755	632	533	452	385	329	282	242
24-3/4	16870	11588	8431	6396	5010	4023	3298	2748	2322	1985	1610	1315	1085	904	759	641	545	465	399	343	296
26-1/8	18750	12881	9372	7111	5570	4475	3668	3057	2584	2210	1902	1555	1284	1071	900	762	648	555	477	411	356
27-1/2	20726	14239	10361	7862	6160	4949	4057	3383	2859	2446	2114	1821	1506	1257	1058	896	764	655	564	488	423
28-7/8	22798	15664	11399	8651	6778	5447	4466	3724	3149	2694	2328	2030	1751	1463	1233	1046	893	766	661	572	498

Notes:

- (1) For preliminary design use only. Final design should include a complete analysis, including bearing stresses and lateral stability.
- (2) Span = simply supported beam.
- (3) Maximum deflection = L/360 under live load, based on live/total load = 0.8. Where additional stiffness is desired or for other live/total load ratios, design for deflection must be modified per requirements.
- (4) Service condition = dry.
- (5) Tabulated values represent total loads based on live/total load = 0.8 and have taken the dead weight of the beam (assumed 36 pcf) into account.
- (6) Sufficient bearing length shall be provided at supports
- (7) Maximum beam shear is located at a distance from the supports equal to the depth of the beam.



Load Duration Factor = 1.15, Fb = 2,400 psi, Fv = 300 psi, E = 1,800,000 psi

10-3/4-INCH WIDTH		SPAN (ft)																			
Depth (in.)	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
11	3959	2728	1981	1499	1061	765	568	430	332	260	206	165	132	107	86	70	56	---	---	---	---
12-3/8	5008	3436	2496	1890	1478	1099	817	622	482	379	302	243	197	161	132	108	89	73	60	---	---
13-3/4	6154	4223	3069	2325	1818	1458	1129	862	670	529	423	342	279	229	189	157	131	109	91	75	62
15-1/8	7415	5090	3700	2804	2194	1760	1440	1155	900	712	572	464	380	314	261	218	182	153	129	109	92
16-1/2	8790	6035	4388	3326	2603	2089	1710	1424	1177	933	751	611	502	416	347	291	245	208	176	150	127
17-7/8	10278	7058	5133	3892	3047	2446	2003	1668	1408	1195	963	785	646	537	449	378	320	272	232	199	170
19-1/4	11880	8159	5934	4501	3524	2830	2318	1931	1631	1394	1203	988	815	679	569	481	408	348	298	256	221
20-5/8	13594	9338	6793	5153	4035	3241	2656	2213	1870	1598	1380	1202	1011	843	709	600	510	437	375	324	280
22	15421	10594	7707	5847	4580	3679	3016	2513	2124	1816	1569	1367	1201	1031	868	736	628	538	464	401	348
23-3/8	17360	11927	8678	6585	5159	4145	3398	2832	2394	2048	1770	1543	1355	1198	1049	891	761	654	564	489	425
24-3/4	19411	13337	9705	7365	5771	4637	3802	3170	2680	2293	1982	1728	1518	1343	1195	1065	911	784	678	588	513
26-1/8	21573	14823	10788	8188	6416	5156	4229	3526	2982	2552	2206	1924	1691	1496	1332	1192	1072	930	805	700	611
27-1/2	23846	16386	11926	9053	7095	5702	4677	3901	3299	2824	2442	2130	1872	1657	1476	1321	1188	1073	947	825	721
28-7/8	26230	18026	13121	9960	7807	6275	5148	4294	3632	3110	2689	2346	2063	1826	1627	1457	1310	1184	1074	962	843

Notes:

- (1) For preliminary design use only. Final design should include a complete analysis, including bearing stresses and lateral stability.
- (2) Span = simply supported beam.
- (3) Maximum deflection = L/180 under total load. Other deflection limits may apply.
- (4) Service condition = dry.
- (5) Tabulated values represent total loads and have taken the dead weight of the beam (assumed 36 pcf) into account.
- (6) Sufficient bearing length shall be provided at supports
- (7) Maximum beam shear is located at a distance from the supports equal to the depth of the beam.



Load Duration Factor = 1.25, Fb = 2,400 psi, Fv = 300 psi, E = 1,800,000 psi

10-3/4-INCH WIDTH Depth (in.)	SPAN (ft)																				
	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
11	4306	2967	2155	1523	1061	765	568	430	332	260	206	165	132	107	86	70	56	---	---	---	---
12-3/8	5446	3737	2716	2057	1519	1099	817	622	482	379	302	243	197	161	132	108	89	73	60	---	---
13-3/4	6692	4594	3339	2531	1980	1516	1129	862	670	529	423	342	279	229	189	157	131	109	91	75	62
15-1/8	8063	5536	4025	3051	2388	1916	1512	1155	900	712	572	464	380	314	261	218	182	153	129	109	92
16-1/2	9558	6563	4773	3619	2833	2274	1863	1508	1177	933	751	611	502	416	347	291	245	208	176	150	127
17-7/8	11176	7676	5583	4235	3316	2662	2181	1817	1505	1195	963	785	646	537	449	378	320	272	232	199	170
19-1/4	12917	8873	6455	4897	3835	3080	2524	2103	1777	1501	1211	988	815	679	569	481	408	348	298	256	221
20-5/8	14781	10154	7388	5606	4391	3527	2892	2410	2037	1742	1497	1224	1011	843	709	600	510	437	375	324	280
22	16767	11520	8383	6361	4984	4004	3283	2737	2314	1979	1711	1491	1235	1031	868	736	628	538	464	401	348
23-3/8	18875	12969	9438	7163	5613	4510	3699	3084	2608	2232	1929	1682	1478	1245	1049	891	761	654	564	489	425
24-3/4	21105	14502	10555	8011	6279	5046	4139	3452	2919	2498	2160	1884	1656	1466	1254	1065	911	784	678	588	513
26-1/8	23455	16118	11732	8906	6980	5611	4602	3839	3247	2780	2404	2097	1844	1632	1454	1261	1080	930	805	700	611
27-1/2	25926	17818	12970	9846	7718	6205	5090	4247	3593	3076	2661	2322	2042	1808	1610	1442	1267	1093	947	825	721
28-7/8	28517	19600	14268	10833	8492	6828	5602	4674	3955	3387	2930	2557	2249	1992	1775	1590	1431	1273	1104	962	843

Notes:

- (1) For preliminary design use only. Final design should include a complete analysis, including bearing stresses and lateral stability.
- (2) Span = simply supported beam.
- (3) Maximum deflection = L/180 under total load. Other deflection limits may apply.
- (4) Service condition = dry.
- (5) Tabulated values represent total loads and have taken the dead weight of the beam (assumed 36 pcf) into account.
- (6) Sufficient bearing length shall be provided at supports
- (7) Maximum beam shear is located at a distance from the supports equal to the depth of the beam.